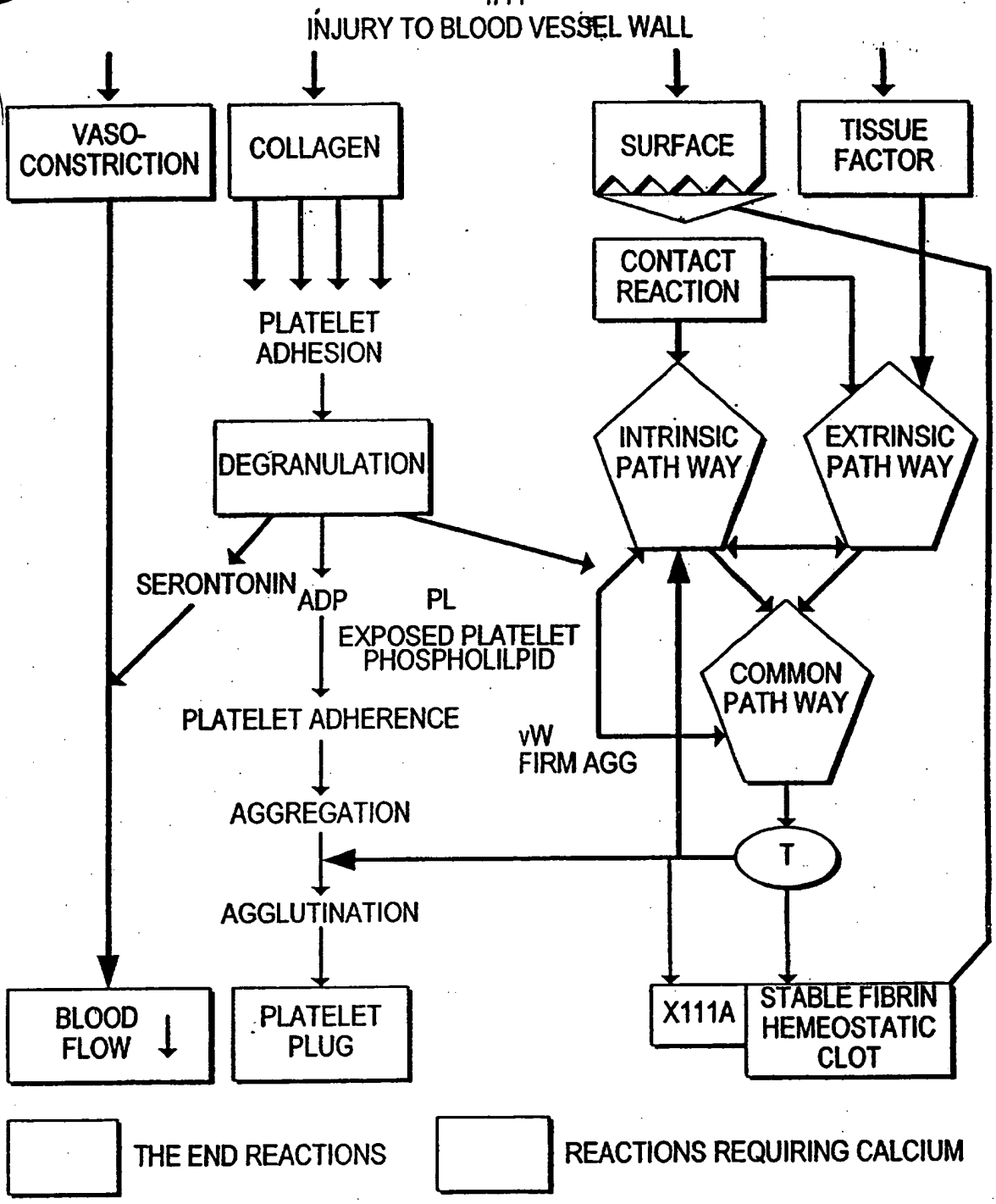
1/11



HEMOSTATIC REACTIONS.

FIG. 1A

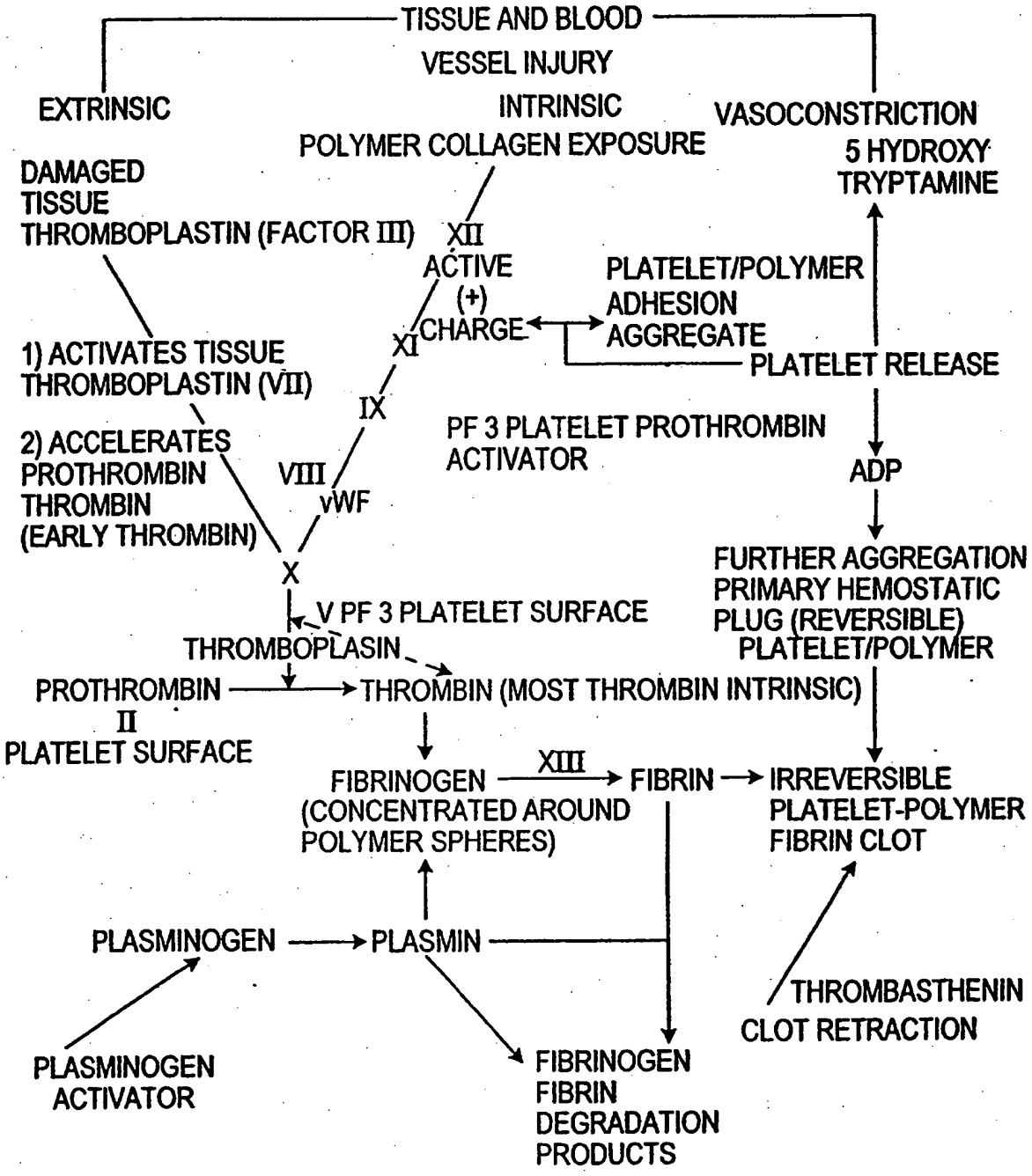

TISSUE AND BLOOD VESSEL INJURY
EXTRINSIC
INTRINSIC
VASOCONSTRICTION
POLYMER COLLAGEN EXPOSURE
5 HYDROXY TRYPTAMINE
DAMAGED TISSUE THROMBOPLASTIN (FACTOR III)
XII
ACTIVE (+) CHARGE
PLATELET/POLYMER ADHESION AGGREGATE
1) ACTIVATES TISSUE THROMBOPLASTIN (VII)
XI
PLATELET RELEASE
IX
2) ACCELERATES PROTHROMBIN THROMBIN (EARLY THROMBIN)
VIII
vWF
PF 3 PLATELET PROTHROMBIN ACTIVATOR
ADP
X
FURTHER AGGREGATION PRIMARY HEMOSTATIC PLUG (REVERSIBLE) PLATELET/POLYMER
V PF 3 PLATELET SURFACE
THROMBOPLASIN
PROTHROMBIN
II
THROMBIN (MOST THROMBIN INTRINSIC)
PLATELET SURFACE
XIII
FIBRINOGEN (CONCENTRATED AROUND POLYMER SPHERES)
FIBRIN
IRREVERSIBLE PLATELET-POLYMER FIBRIN CLOT
PLASMINOGEN
PLASMIN
THROMBASTHENIN
CLOT RETRACTION
PLASMINOGEN ACTIVATOR
FIBRINOGEN FIBRIN DEGRADATION PRODUCTS

FIG. 1B

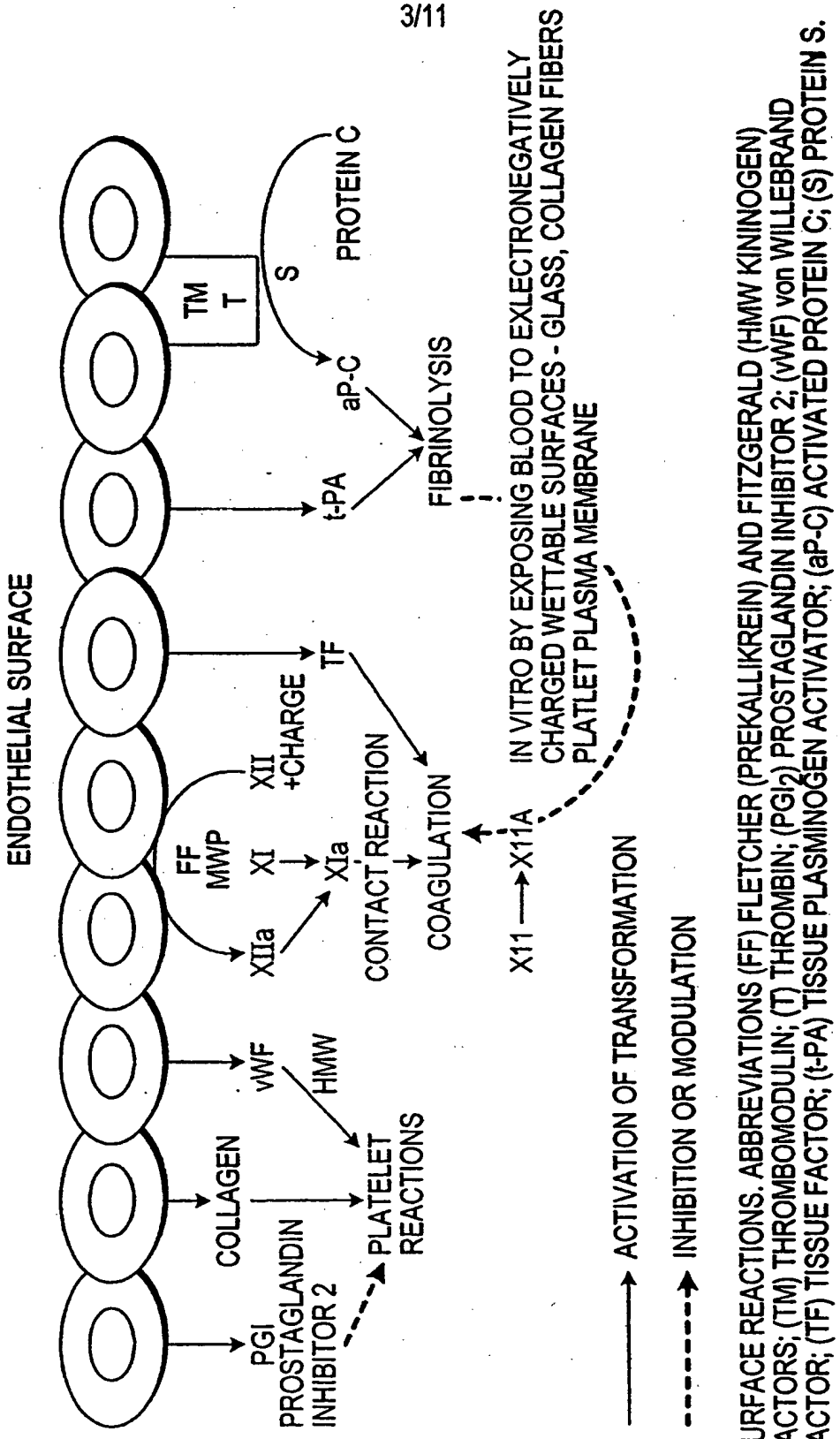

ENDOTHELIAL SURFACE
PGI
PROSTAGLANDIN
INHIBITOR 2
COLLAGEN
vWF
HMW
PLATELET
REACTIONS
FF
MWP
XII
+CHARGE
XI
XIa
XIIa
CONTACT REACTION
TF
COAGULATION
X11 → X11A
IN VITRO BY EXPOSING BLOOD TO EXLECTRONEGATIVELY CHARGED WETTABLE SURFACES - GLASS, COLLAGEN FIBERS PLATLET PLASMA MEMBRANE
TM
T
S
PROTEIN C
aP-C
t-PA
FIBRINOLYSIS
ACTIVATION OF TRANSFORMATION
INHIBITION OR MODULATION
SURFACE REACTIONS. ABBREVIATIONS (FF) FLETCHER (PREKALLIKREIN) AND FITZGERALD (HMW KININOGEN) FACTORS; (TM) THROMBOMODULIN; (T) THROMBIN; (PGI_2) PROSTAGLANDIN INHIBITOR 2; (vWF) von WILLEBRAND FACTOR; (TF) TISSUE FACTOR; (t-PA) TISSUE PLASMINOGEN ACTIVATOR; (aP-C) ACTIVATED PROTEIN C; (S) PROTEIN S.

FIG. 2

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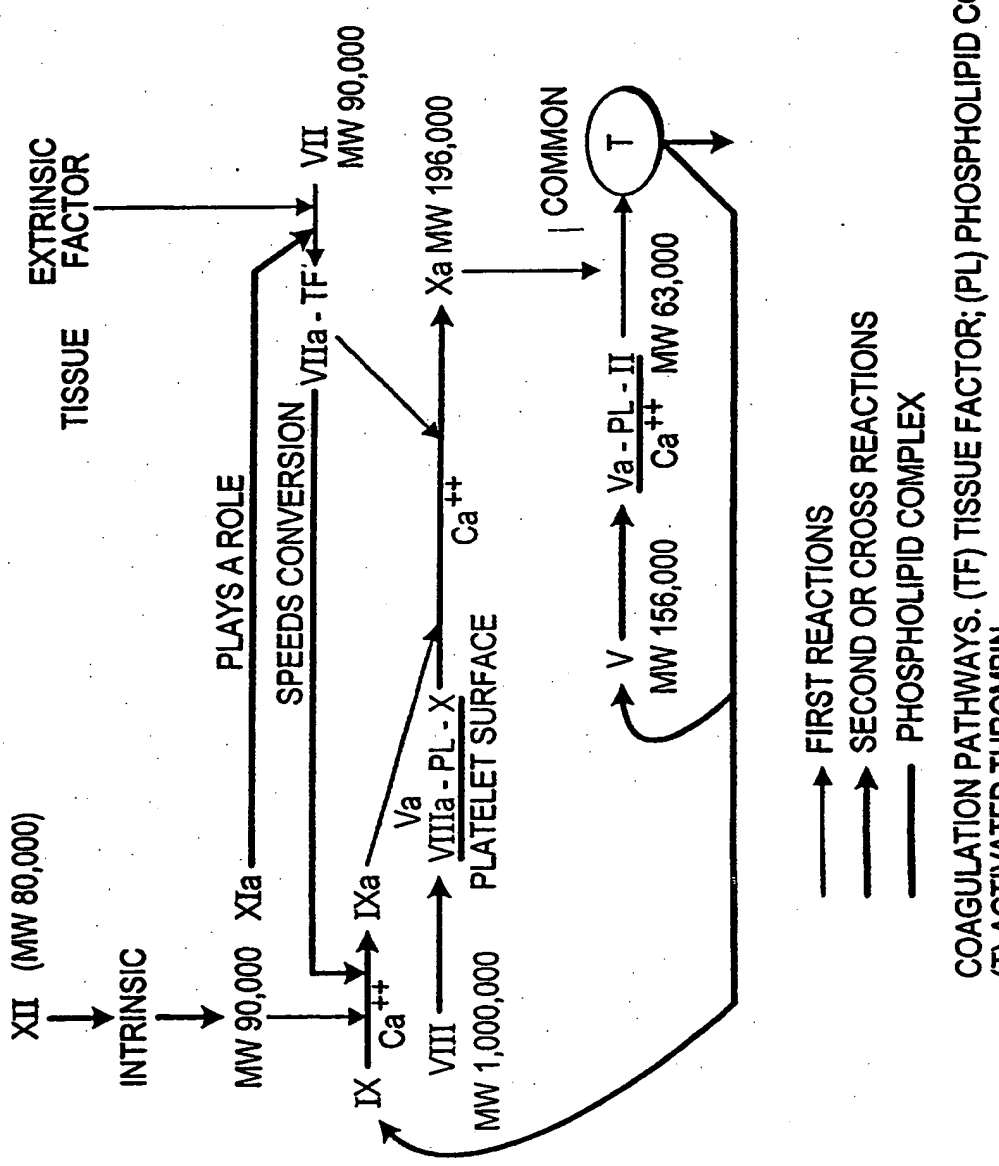

COAGULATION PATHWAYS. (TF) TISSUE FACTOR; (PL) PHOSPHOLIPID COMPLEX
(T) ACTIVATED THROMBIN.

FIG. 3

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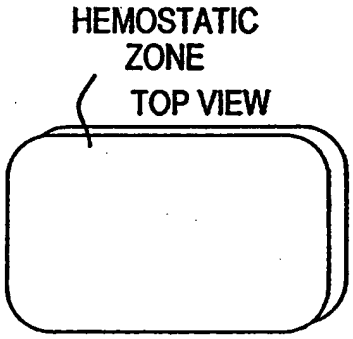
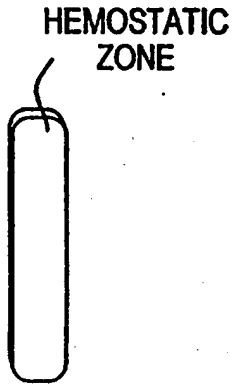


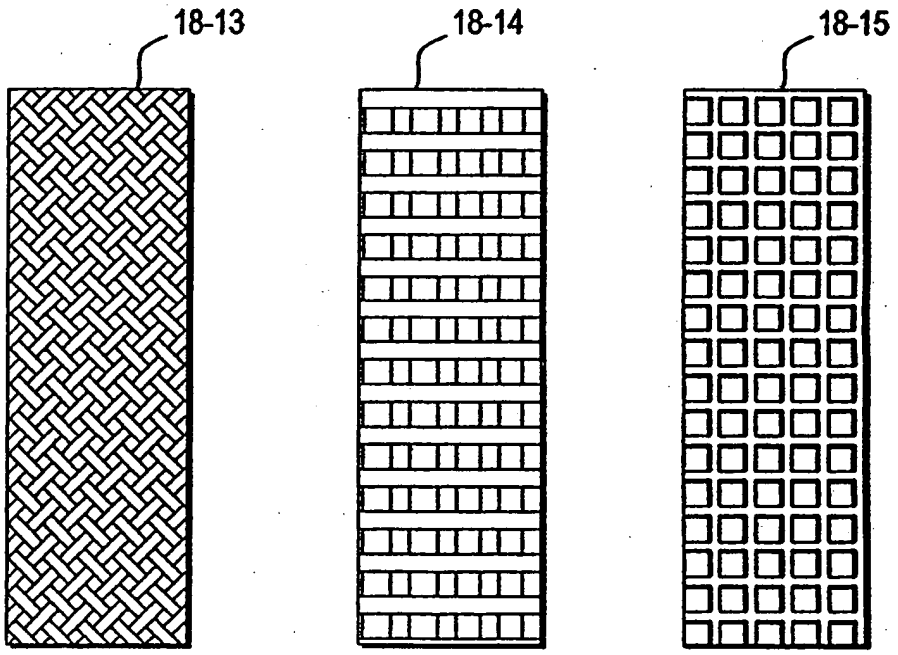
HEMEX BAG (REAGENT ZONE)

FIG. 4A



SIDE VIEW

FIG. 4B



ENLARGED VIEWS OF COVERING SEPARATION MATERIAL
(EXAMPLES OF DIFFERENT MATRIX TEXTURES)

FIG. 5A FIG. 5B FIG. 5C

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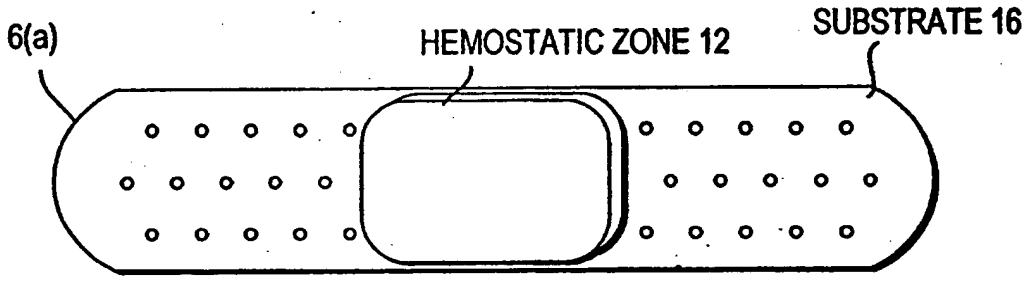
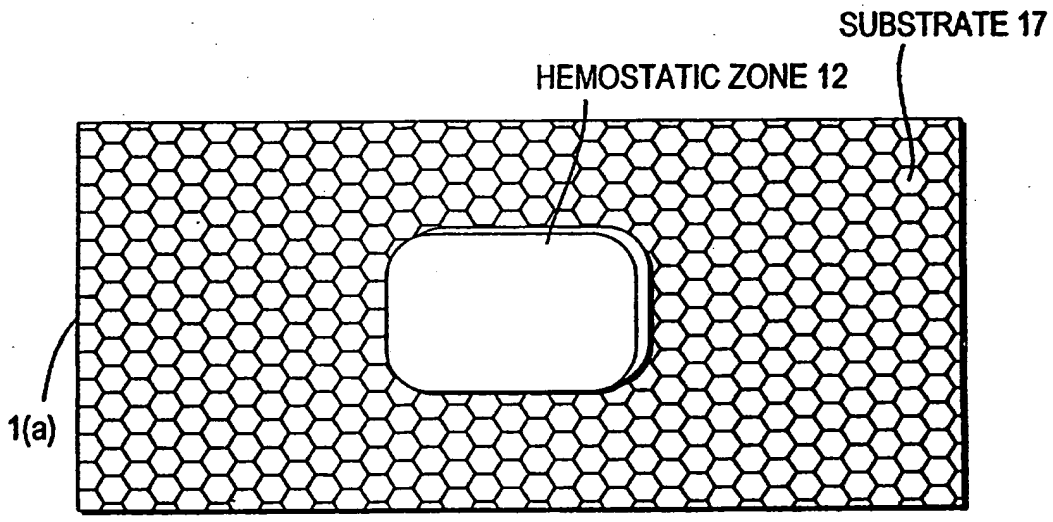


FIG. 6A



HEMEX BAG (REAGENT ZONE) ON ADHESIVE BACKING

FIG. 6B

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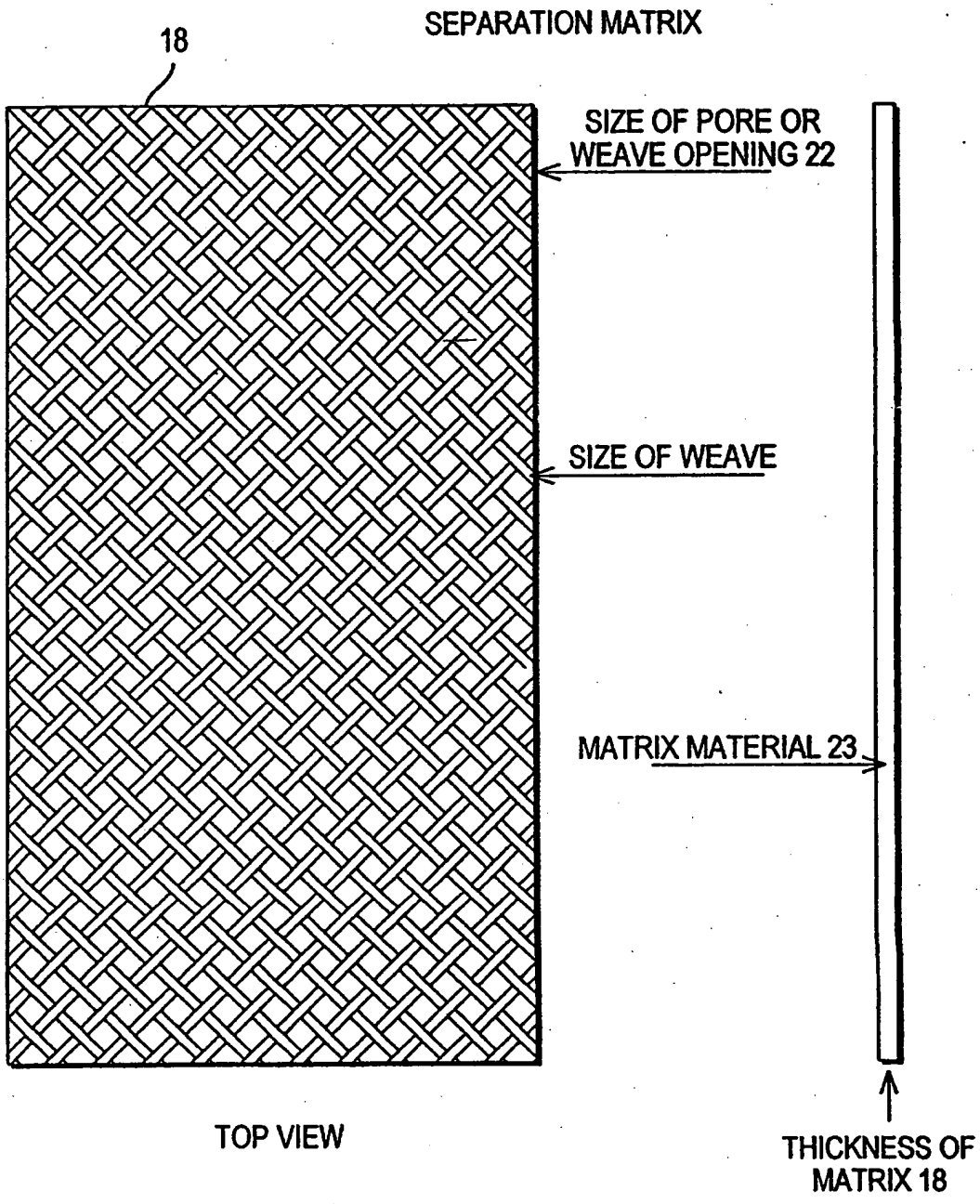

FIG. 7A

FIG. 7B

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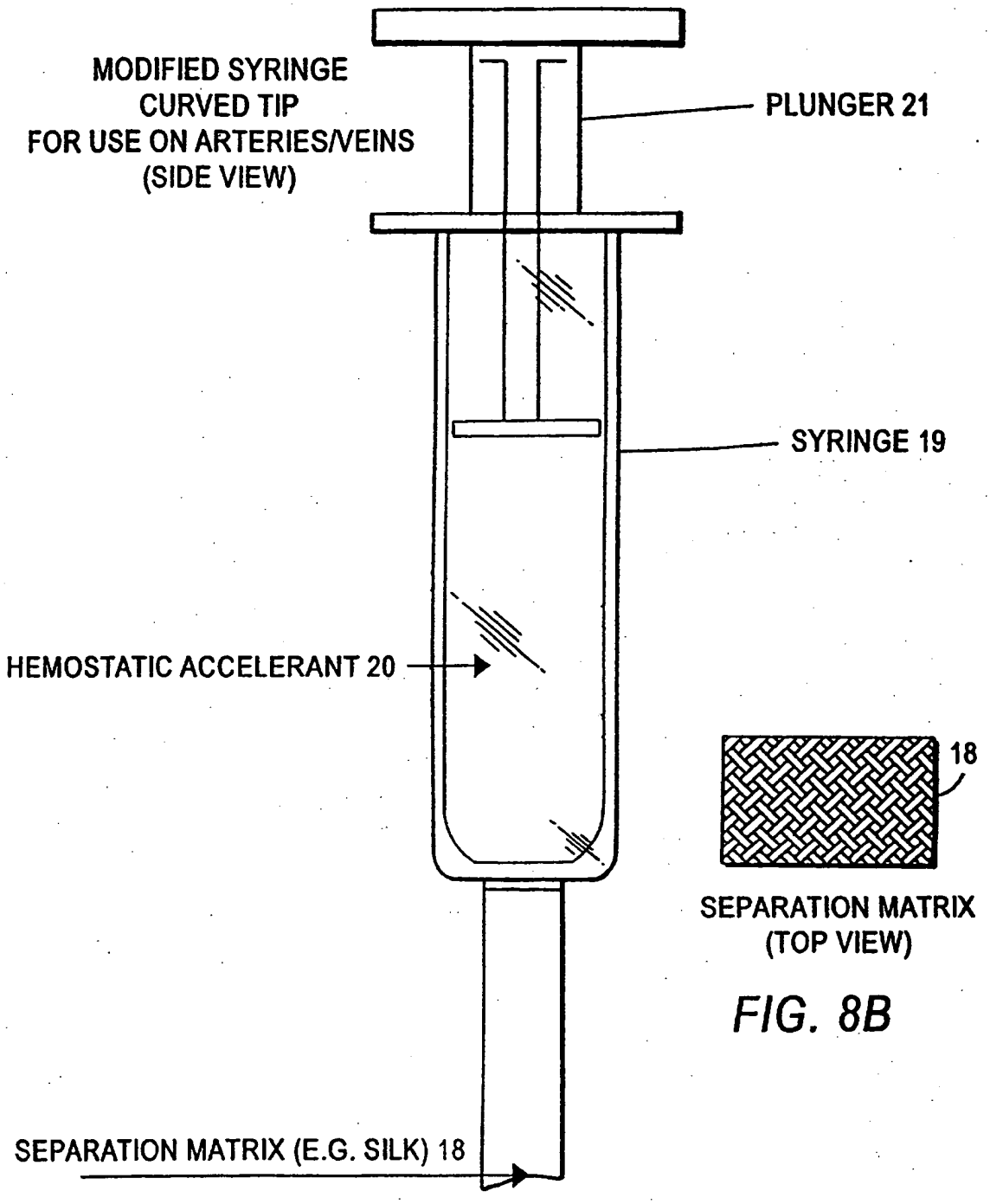

FIG. 8B

FIG. 8A

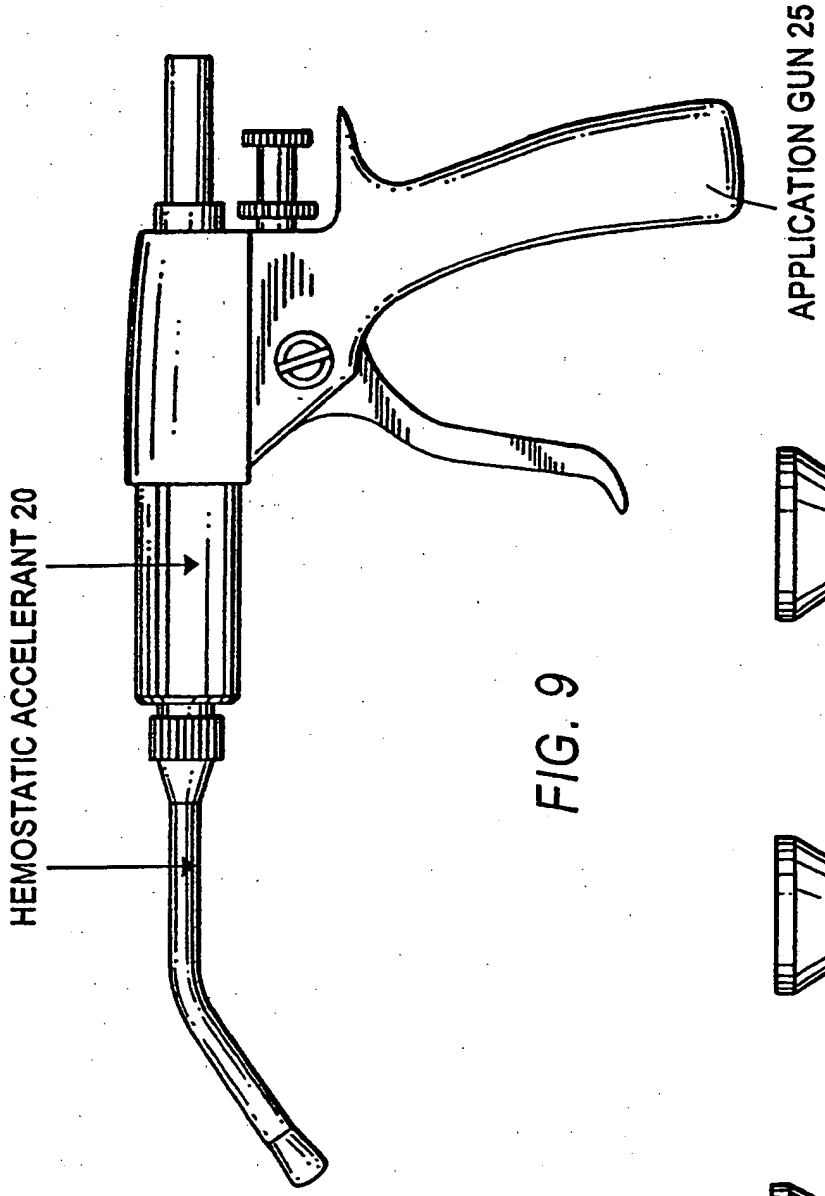

FIG. 9

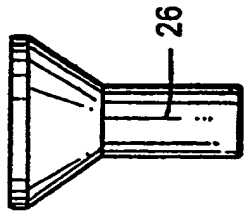

FIG. 9C

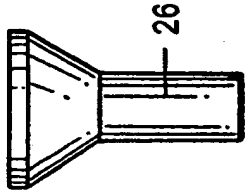

FIG. 9B

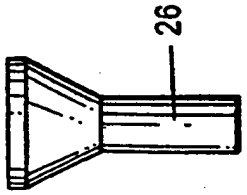

FIG. 9A

(TOP VIEW OF SPREADER TIPS)

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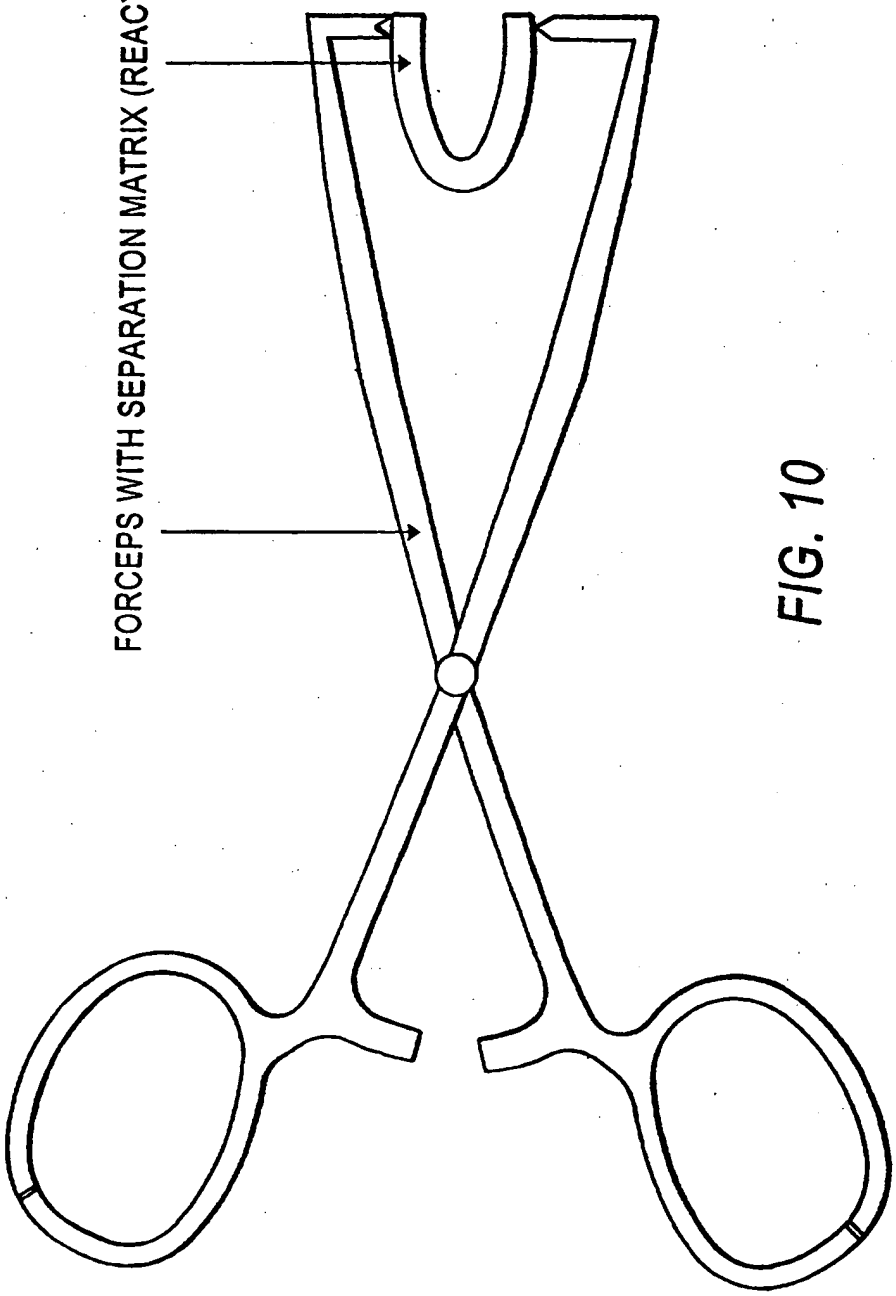

FIG. 10

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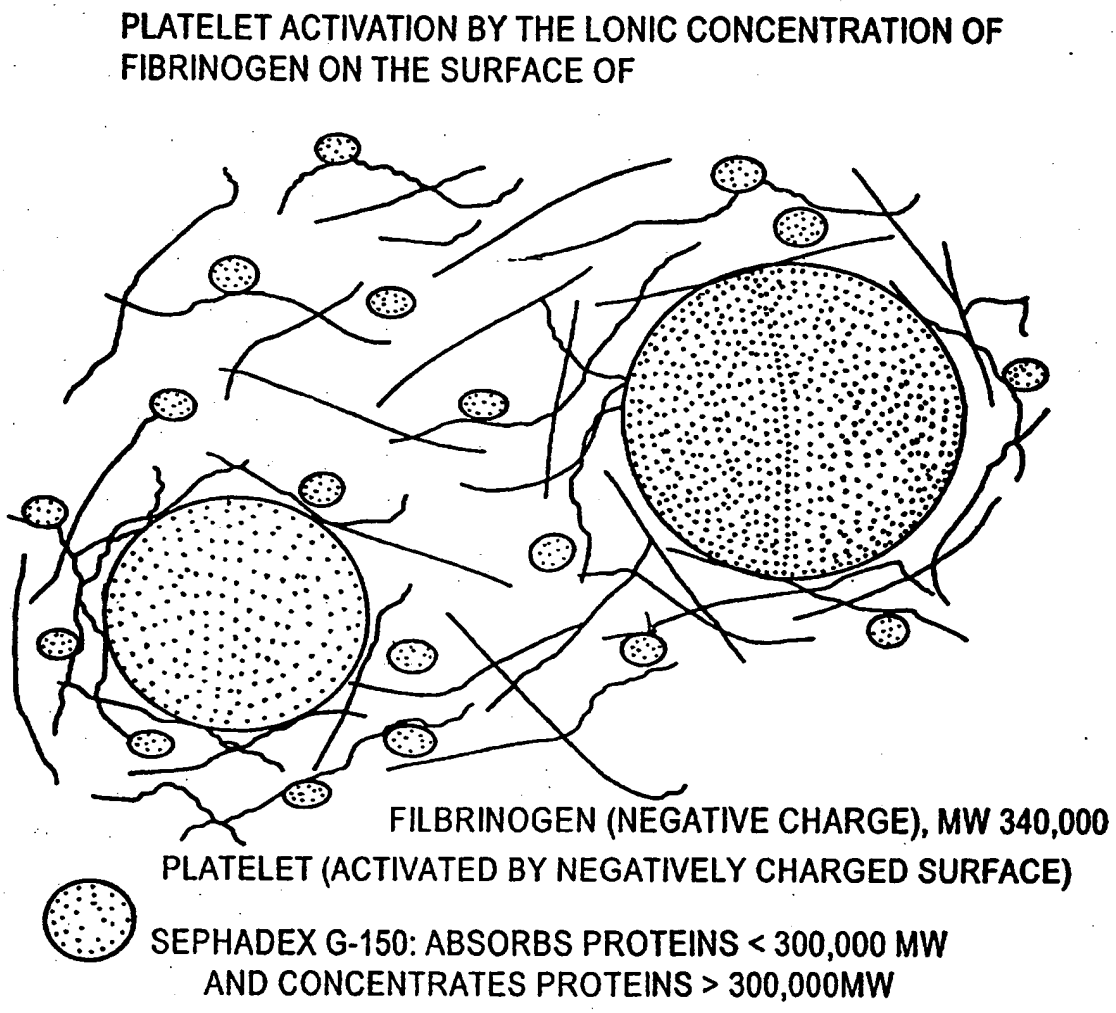
PLATELET ACTIVATION BY THE LONIC CONCENTRATION OF FIBRINOGEN ON THE SURFACE OF
FILBRINOGEN (NEGATIVE CHARGE), MW 340,000
PLATELET (ACTIVATED BY NEGATIVELY CHARGED SURFACE)
SEPHADEX G-150: ABSORBS PROTEINS < 300,000 MW
AND CONCENTRATES PROTEINS > 300,000MW

FIG. 11